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ABSTRACT

Project TALENT is a national longitudinal study which tests secondary school students with a two-day test battery. This paper reports on a follow-up study made five years after the tests were given to a sample of 440,000 high school students to determine the degree of correspondence between test results and later realization of career plans. Occupations are grouped into seven major groups according to the stringency of their entry requirements or specialized route of preparation. Means, standard deviations, and point-biserial correlations are reported for selected career plan groups in 10 tables included with the report of the study. (SR)

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The Use of Twelfth Grade TALENT Data to Predict Occupational Activities Five Years After High School Graduation

Thomas J. Quirk
American Institutes for Research

CG004 599

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Project TALENT is a national longitudinal study of secondary school students (Flanagan, 1964; 1966; Shaycoft, 1967). Approximately 440,000 high school students took a two day battery of Project TALENT tests in 1960, and this report will focus on the occupational career plans of grade 12 students who responded to a questionnaire five years after their expected high school graduation. The data reported here relate to the 14,125 grade 12 males and the 14,703 grade 12 females who responded to the five-year followup questionnaire and on whom we had complete data on 119 TALENT variables. The occupational group membership of a respondent was "purified" to include only those respondents who reported specific career plans and who are also making reasonable progress toward attaining these plans. Only those respondents who were actually in a job or who were in a position or general type of training program which could lead to this job were included. The occupational career codes were categorized into the following seven major groups according to their responses to certain key items on the five-year followup questionnaire (see Table 1):

Group 0 consists of those occupations with no clear entry routes or entry requirements, and therefore the student's statement that he is a member, or will be a member, is not challenged and no purification rules are applied.

Group 1 is composed of occupations for which there are no clear entry routes and few entry requirements. An individual's statement that he is a member of one of these occupations is accepted if he indicates elsewhere on the questionnaire that he already holds a job in the area or claims that he has received some special training or experience in the last five years that is directed toward that job. A response of A-E for item 8B, or A-H for item 8C, or 6A when the response to 6A is identical to 8A was sufficient for retention in these occupational groups. Students who were rejected for CPA were counted as Group 717: Accountant, auditor, comptroller (except CPA).

Group 2 consists of those occupations requiring licensing or certification, but not requiring a single route of preparation for obtaining that

certificate. If the student responds to column A of item 21 (i.e., have received), no further checks are made and he is accepted for membership in that group; if the student responds to column B of item 21 (i.e., plan to obtain), the student must have a "one" coded for item 23A (i.e., has indicated a college) or have made a specific response to item 20 in order to be accepted for membership in these groups.

Group 3 consists of occupations requiring at least an undergraduate degree for entrance into the field. If the student's response is column A of item 22, (i.e., have received) for educational levels 2-8, he is accepted for membership in the group; if he answers in column B to item 22 (i.e., plan to obtain) for educational levels 2-8, question 23A must be coded as a "one" to show some experience with a college degree program in order for the student to be accepted for membership in these groups.

Group 4 consists of occupations requiring at least an undergraduate degree for entrance into the field and also requiring education in specified areas. If the student has answered in column A of item 22 (i.e., have received) for educational levels 2-8, he is accepted for membership in the group; if the student answered in column B of item 22 (i.e., plan to obtain) for educational levels 2-8, question 23A must be coded "one" to indicate college contact with a degree program and items 25A, B, C should indicate an appropriate area of study.

Group 5 consists of occupations requiring at least a Master's degree for entrance into the field and education is specified areas. If the student has either answered item 22A (i.e., have received) for educational levels 3-8 or has answered "6" to item 28 indicating he is in graduate school, he is accepted for membership in the group; if the student answered 22B (i.e., plan to obtain) for educational levels 3-8, question 23A should be coded as "one" to show experience in a college degree program and 25A, B, C should indicate an appropriate area of study.

Group 6 consists of occupations which require a special degree such as M.D. or LLB. If the student answers item 22A (i.e., have received) as either 5, 6, 7, or 8, he is accepted for membership in the group; if he answers item 22B (i.e., plan to obtain), question 28 must indicate that the

student has attained at least junior year standing in undergraduate college. For law only, item 23A coded as "one" is required for inclusion.

The career plan groups which were finally selected for this study are reported in Table 2. Occupational groups were selected which would represent a wide range of occupational careers in terms of educational and training requirements for entry into these occupations. Means and standard deviations, unweighted for non-respondents, for the 17 selected TALENT cognitive variables for the entire respondent group on whom we have complete data on 119 TALENT variables appears in Table 3. Means and standard deviations for selected career plan groups on these 17 selected variables for males appear in Table 4 and for females appear in Table 5. The test scores reported were achieved when the students were tested in the twelfth grade.

Point-biserial correlations were computed between the 17 TALENT variables (the continuous variable) and membership in the purified occupational group (the dichotomous variable) for each of the selected career plan groups. Point-biserial correlation coefficients were computed separately for males and females using the following formula (McNemar, 1962):

$$r_{pb} = \frac{M_2 - M_y}{S_y} \sqrt{\frac{p_2}{p_1}} \qquad (1)$$

where M_2 = mean of students on the continuous variable for cases in the given occupational group,

M_y = mean of all students on the continuous variable,

S_y = standard deviation of all students on the continuous variable,

p_2 = proportion of students in the given occupation group,

p_1 = proportion of students in the remaining occupational groups when the specified occupational group is separated out.

The point-biserial correlations for the 17 selected variables for the males appear in Table 6, and the point-biserial coefficients for the females appear in Table 7. The reader will notice that the point-biserial correlation coefficients appear to be close to zero. This result is due to the fact that the split between the number of cases in any career group in comparison to the total number of cases in the occupational group sample departs widely from a 50-50 split.

The point biserial correlation coefficients were then treated as Pearson product-moment correlations and multiple regression equations for standard scores on the 17 TALENT tests using a mean of 50 and a standard deviation of 10 were computed. The intercorrelations among the 17 TALENT variables appear in Table 8. The beta weights and the multiple correlation coefficients for males appear in Table 9 and for females appear in Table 10. In each case the point-biserial multiple correlation coefficient was converted to a biserial multiple correlation coefficient by means of the formula (McNemar, 1962):

$$r_b = \frac{r_{pb}\sqrt{p_1 p_2}}{z} \qquad (2)$$

where p_2 = proportion of cases in the career plan group,

p_1 = proportion of cases in all other occupational groups,

z = ordinate for the unit normal curve for p_2.

The values of z were determined using Kelley's (1948) tables. The biserial multiple correlation coefficients given in Table 9 and Table 10 provide an easier interpretation of the predictive validity of the 17 selected TALENT variables than the point-biserial multiple correlation coefficients which represent a very small proportion of the total cases included in this study.

The reported biserial multiple correlations for males range from 0.14

to 0. 50 and for females range from 0. 14 to 0. 64. Some of the career plan groups for males which can be predicted moderately well include chemist (0. 37), engineer (0. 43), architect (0. 35), M.D. (0. 50), law (0. 37), college or university teacher (0. 38), teaching music (0. 39), carpenter (0. 43), farming (0. 39), electrical or electronic engineer (0. 46), and auto mechanic (0. 39). Some of the career plan groups which can be predicted moderately well for females include teaching high school math (0. 64), teaching high school science (0. 36), college or university teacher (0. 36), salesclerk (0. 43), and hairdresser (0. 36).

The data reported here need to be cross-validated using the five-year followup plans of eleventh grade students in order to determine if the 17 selected cognitive variables maintain their predictive power for high school students tested in different levels of their high school program.

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TABLE 1

Selected Items from Project TALENT Five-Year Followup Questionnaire for Twelfth Grade Students

6. If you had a paid job as of October 1, 1965:

(a) What was this job called? _____

(b) What did you do on it? _____

_____

_____

8. (a) What occupation do you plan to make your life work? Be as specific as possible. (For instance, if military service, specify type of work.)

_____

_____

_____

(b) What steps have you taken in this direction? Mark as many as apply.

- ☐ 8 a. I now have a regular job in this field.
- ☐ 4 b. I now have a job as a trainee in this field.
- ☐ 2 c. My present job may lead to work in this field.
- ☐ 1 d. I am doing volunteer work in this field.
- ☐ 1 e. I have had special training or education in this field.
- ☐ 9 f. None of the above.

(c) If you have had special training or education in this field, how or where did you get it? (Mark as many as apply.)

- ☐ 1 a. In high school.
- ☐ 2 b. In college as an undergraduate.
- ☐ 4 c. In graduate school or professional school after college.
- ☐ 8 d. In some other kind of school, since high school.
- ☐ 1 e. An apprenticeship program.
- ☐ 2 f. On-the-job training (informal or formal).
- ☐ 4 g. An informal program: reading or other independent study.
- ☐ 1 h. Some other way.
- ☐ 9 i. I have had no special training or education in this field.

20. Did you attend any other type of school?

- ☐ No.
- ☐ Yes, a technical institute for electronics, drafting, computer programming, or something similar.
- ☐ Yes, a school of nursing (3-year program).
- ☐ Yes, a school of practical nursing.
- ☐ Yes, a secretarial or business school.
- ☐ Yes, a trade or apprentice school or vocational school.
- ☐ Yes, an armed forces enlisted-man's school.
- ☐ Other. (Please specify.) _____

21. Which of the following licenses, certificates, or diplomas have you obtained or do you plan to obtain? (Mark as many as apply.)

(a) Have Rec'd.	(b) Plan to Obtain	
☐	☐	1. Certificate based upon apprenticeship or on-the-job training. (Describe)_____
☐	☐	2. Certificate or license based upon correspondence or other specified courses. (Please describe.) _____
☐	☐	3. Trade school certificate.
☐	☐	4. Business school or secretarial diploma.
☐	☐	5. Practical nursing certificate.
☐	☐	6. RN (Registered Nurse)
☐	☐	7. Certificate from a technical institute.
☐	☐	8. CPA (Certified Public Accountant).
☐	☐	0. None of the above.

22. Which of the following college degrees or diplomas have you earned or do you plan to earn? (Mark as many as apply.)

(a) Have Rec'd.	(b) Plan to Obtain	
☐	☐	0. None
☐	☐	1. Junior college diploma (e.g. Associate in Arts, etc.)
☐	☐	2. B.A., B.S., B.B.A., B.F.A. (e.g., B.A. in History, B.S. in Ed., etc.)
☐	☐	2. Other bachelor's degree (Specify). _____
☐	☐	3. M.A. or M.S.
☐	☐	3. Other master's degree (Specify). _____
☐	☐	4. Ph.D. or Ed.D.
☐	☐	5. LL.B. (law)
☐	☐	6. M.D. (medicine)
☐	☐	7. D.D.S. (dentistry)
☐	☐	8. Other professional degree (Specify) _____
☐	☐	9. Other (Specify) _____

25. As an undergraduate, in which of the following areas was or is your major in college and which was (is) your minor? (If you did not have a formal minor, mark the other area in which you took the most courses.) Also, if you are a graduate student, what is your graduate major? (Mark ONE for each.)

(a) Undergraduate Major	(b) Undergraduate Minor	(c) Graduate Major	
☐	☐	☐	01. Mathematics
☐	☐	☐	02. Physical Sciences
☐	☐	☐	03. Biological sciences
☐	☐	☐	04. Psychology
☐	☐	☐	05. History
☐	☐	☐	06. Economics
☐	☐	☐	07. Social sciences (other)
☐	☐	☐	08. Social work
☐	☐	☐	09. English
☐	☐	☐	10. Foreign languages
☐	☐	☐	11. Fine Arts
☐	☐	☐	12. Music
☐	☐	☐	13. Philosophy
☐	☐	☐	14. Religion or Theology
☐	☐	☐	15. Law (Pre-Law)
☐	☐	☐	16. Medicine (Pre-Medicine)
☐	☐	☐	17. Dentistry (Pre-Dentistry)
☐	☐	☐	18. Nursing
☐	☐	☐	19. Other health professions
☐	☐	☐	20. Engineering
☐	☐	☐	21. Architecture
☐	☐	☐	22. Elementary education
☐	☐	☐	23. Physical education
☐	☐	☐	24. Education (other)
☐	☐	☐	25. Accounting
☐	☐	☐	26. Business and commerce
☐	☐	☐	27. Home Economics
☐	☐	☐	28. Agriculture or Forestry
☐	☐	☐	29. Some other (please specify.) _____
☐	☐		00. None – I do not intend to earn a bachelor's degree.
		☐	00. None – I am not doing graduate work.

28. Please indicate your present class status in college (or the highest level you have reached).

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior
- ☐ I have already earned a bachelor's degree, and have not done any graduate work.
- ☐ I have already earned a bachelor's degree, and am or have been a graduate student.

23. What colleges or universities have you attended as an undergraduate? If you have already earned a bachelor's degree, please specify the degree, and the month and year received. (Put the college you last attended or are now attending first.)

Name of College or University	City and State	(a) Dates Attended	(b) Degree Earned	(b) Date Mo.	Yr.

TABLE 2

Selected Career Plan Groups for Five-Year Followup of Twelfth Grade Project TALENT Students

Group 0

112 Proprietor, contractor, in business for self (NEC)*
661 Police: Public (NEC)
741 Salesclerk, checker, cashier in a store
748 Other salesmen (NEC)
769 Clerk (misc.)
797 Misc. clerical

Group 1

347 Medical and dental technologists (other)
348 Medical and dental technician (other); also lab technicians in biological and clinical science
431 Teaching art (high school, elementary school, non-school)
432 Teaching music (high school, elementary school, non-school)
575 Theatre
639 Farming: other and misc. (includes gardener, nurseryman, etc.)
717 Accountant, auditor, comptroller (except CPA)
730 Business management, business administration (NEC)
761 Secretary (NEC)
810 Electrician (NEC)
811 Electronic technician
821 Auto mechanic
828 Machinist
832 Carpenter
835 Plumber, pipefitter
864 Draftsman
893 Hairdresser, manicurist, cosmetologist
894 Practical nurse (PN)
766 Typist, Clerk-Typist

Group 2

337 Graduate nurse (RN)
716 CPA

Group 3

370 Social work
400 Teaching (NEC)
412 Teaching elementary school
426 Teaching high school commercial education

Group 4

231 Chemist
240 Engineer (NEC)
242 Electrical or electronic engineer
250 Architect
421 Teaching high school math
422 Teaching high school science
424 Teaching high school English

Group 5

360 Psychologist
460 College or university teacher (NEC)

Group 6

329 M. D., other and unspecified
332 Dentist
393 Law

*Not elsewhere classified

TABLE 3

Overall Mean and Standard Deviation of Total Talent Group of 14, 125 Grade 12 Males and 14, 703 Grade 12 Females on 17 Selected TALENT Tests

Test Name	Test Code Number	Males		Females	
		Mean	Standard Deviation	Mean	Standard Deviation
Vocabulary	R-102	15. 12	3. 49	13. 91	3. 82
Memory for Words	R-212	12. 20	5. 41	14. 31	5. 68
Disguised Words	R-220	16. 98	6. 98	18. 58	6. 81
Spelling	R-231	10. 02	2. 92	11. 53	2. 60
Capitalization	R-232	30. 07	3. 19	30. 91	2. 75
Punctuation	R-233	18. 84	4. 33	20. 73	3. 98
English Usage	R-234	17. 67	3. 15	18. 53	2. 96
Effective Expression	R-235	9. 43	2. 06	9. 82	1. 84
Word Function	R-240	11. 70	5. 50	13. 35	5. 75
Reading Comprehension	R-250	35. 79	9. 49	35. 98	8. 95
Creativity	R-260	11. 13	4. 12	10. 01	3. 83
Mechanical Reasoning	R-270	14. 20	3. 80	9. 58	3. 69
Visualization in Two Dimensions	R-281	15. 18	5. 42	12. 65	5. 46
Visualization in Three Dimensions	R-282	10. 35	3. 33	9. 03	3. 12
Abstract Reasoning	R-290	10. 27	2. 73	9. 89	2. 75
Arithmetic Reasoning	R-311	10. 70	3. 42	9. 62	3. 50
Introductory Mathematics	R-312	13. 97	5. 67	11. 59	5. 12

TABLE 6

Means and Standard Deviations on 17 Selected TALENT Variables for Twelfth Grade Males in Various Career Groups

Group	Title	N	17 TALENT Variables															
			R-182 Vocab.	R-212 Mem. Words	R-220 Diag. Words	R-231 Spelling	R-232 Cap.	R-233 Punct.	R-236 Exp. Ch.	R-238 Eff. Exp.	R-240 Word F(s)	R-250 Read Comp.	R-260 Creat.	R-270 Mech. Reas.	R-281 2-D	R-282 3-D	R-290 Abs. Reas.	R-311 Arith. Reas.	R-312 Intro. Math
231	Chemist	81	17.52 2.58	14.47 5.79	19.77 6.51	10.78 2.78	31.16 1.77	21.11 3.67	19.72 2.48	10.56 1.29	15.17 5.19	42.30 4.30	13.38 3.94	16.26 3.24	16.05 4.98	11.93 2.94	11.88 1.72	13.33 2.55	19.30 4.48
240	Engineer (NEC)	167	17.23 2.63	14.65 5.78	19.16 6.07	10.92 2.57	30.96 2.81	21.35 3.85	18.86 3.07	9.98 1.70	15.95 5.06	41.66 6.03	13.63 3.46	16.68 2.79	17.59 4.05	12.23 2.51	11.89 2.16	13.41 2.29	19.65 4.06
250	Architect	58	16.97 3.11	13.95 5.61	19.26 5.92	10.40 2.49	31.07 1.60	21.03 3.18	18.34 2.69	10.02 1.78	14.07 5.28	39.50 7.17	12.74 3.70	16.50 2.80	18.17 4.11	13.29 1.90	11.86 1.97	12.26 2.62	17.90 4.07
329	M.D., other and unspecified	229	18.24 2.82	16.19 5.01	21.83 5.79	12.17 2.10	31.44 1.22	22.61 3.18	20.10 2.39	10.71 1.38	17.21 4.61	43.49 4.82	13.17 3.49	15.77 3.17	16.34 4.92	11.52 2.86	11.79 2.17	13.67 1.96	20.13 3.31
332	Dentist	97	17.26 1.96	14.67 5.57	19.96 5.99	11.04 2.32	30.95 1.67	21.07 3.06	18.82 2.99	10.03 1.42	14.76 4.49	40.79 5.51	13.19 2.98	16.04 2.81	16.95 4.85	12.09 2.26	11.71 1.89	12.32 2.80	18.14 3.59
716	CPA	280	15.37 2.65	12.49 4.97	17.91 6.47	10.70 2.51	30.69 1.76	19.76 3.86	18.03 2.75	9.58 1.84	12.41 5.12	37.47 7.90	11.14 3.82	14.16 3.81	15.87 5.38	10.23 3.24	10.71 2.40	11.59 2.80	16.00 4.86
730	Business management, business administration (NEC)	511	15.85 3.00	12.66 5.27	17.93 6.66	10.54 2.68	30.47 2.62	19.51 3.80	18.07 2.69	9.59 1.92	12.13 5.07	37.48 8.38	11.88 3.80	14.73 3.52	15.65 5.44	10.66 3.13	10.84 2.46	11.41 3.16	15.16 5.21
400	Teaching (NEC)	423	15.39 2.94	13.09 5.04	17.82 6.77	10.46 2.66	30.47 2.97	19.19 3.75	18.01 2.96	9.76 1.75	12.05 5.12	37.64 7.64	11.08 3.84	13.70 3.75	14.88 5.35	9.83 3.39	10.40 2.27	11.09 3.07	14.53 5.18
370	Social work	60	15.98 3.15	13.57 5.15	19.37 6.28	10.45 3.13	29.80 4.89	18.45 4.75	17.75 3.56	9.70 2.01	12.95 4.68	38.68 7.64	11.48 4.04	13.83 3.75	14.70 5.03	9.75 3.37	10.55 2.21	10.27 3.19	14.27 4.69
360	Psychologist	106	17.58 2.23	14.39 5.28	20.09 6.53	11.55 2.41	31.35 1.30	21.63 3.14	19.79 2.15	10.56 1.43	15.20 4.69	42.60 4.47	13.36 3.24	15.63 2.96	16.04 4.46	11.23 2.86	11.86 1.79	12.55 2.62	17.95 4.36
393	Law	393	17.34 2.46	14.40 5.48	20.28 6.16	11.30 2.76	30.95 3.09	21.15 3.75	19.05 3.02	10.31 1.73	15.24 5.16	41.81 5.96	12.46 3.68	14.55 3.51	15.60 4.90	10.62 3.18	11.28 1.96	12.49 2.78	17.38 4.46
460	College or university teacher (NEC)	179	17.50 2.46	15.45 5.68	21.84 5.21	11.83 2.70	31.36 1.33	22.24 3.20	19.73 2.53	10.63 1.32	16.31 4.79	42.39 5.45	13.53 3.23	15.40 3.48	16.68 4.89	11.49 3.20	11.79 2.10	12.81 2.67	17.93 4.91
432	Teaching music (high school, elementary school, non-school)	38	16.61 2.65	12.29 4.64	20.53 5.53	11.13 2.00	30.71 1.68	20.45 3.74	19.16 2.80	9.92 1.89	14.37 5.34	37.63 6.12	10.47 3.78	13.82 3.20	15.18 5.62	10.32 3.45	9.95 2.65	10.32 3.20	13.61 5.36
575	Theatre	23	17.13 2.77	14.35 4.66	20.83 6.02	11.48 2.25	30.87 1.46	20.83 3.05	18.35 3.01	10.78 1.35	14.17 4.85	41.87 5.63	13.78 2.91	16.70 3.25	17.57 4.10	11.96 3.64	11.30 2.38	12.00 2.84	14.91 5.20
811	Electronic technician	212	15.30 3.28	11.16 5.03	16.20 6.54	9.33 2.85	29.78 3.28	18.17 4.25	17.30 2.78	9.09 2.10	10.85 4.79	36.10 8.07	11.65 3.77	15.60 3.20	15.77 4.97	11.29 2.90	10.47 2.46	10.85 2.95	13.77 4.91
864	Draftsman	140	13.55 2.82	11.21 5.10	14.72 6.48	8.99 2.90	29.81 3.28	16.96 4.36	16.55 3.21	8.91 1.99	9.41 4.33	31.49 8.70	10.34 3.72	14.09 3.24	15.45 5.10	10.96 2.74	10.22 2.48	9.60 2.96	11.88 4.69
112	Proprietor, contractor, in business for self (NEC)	278	14.19 3.57	11.41 5.22	15.96 7.08	9.14 2.84	29.63 3.42	17.42 4.38	17.12 2.94	9.32 2.00	10.08 5.21	33.23 9.28	10.87 3.98	14.35 3.70	15.35 5.59	10.52 3.18	10.00 2.65	9.96 3.22	11.99 5.06
748	Other salesman (NEC)	350	14.64 3.27	11.71 4.80	16.45 6.55	9.63 2.88	29.90 3.40	18.12 4.19	17.29 2.87	9.34 2.17	10.42 4.92	34.85 8.47	10.45 3.89	13.64 3.59	14.34 5.59	9.64 3.12	9.76 2.71	10.28 3.23	12.63 5.01
810	Electrician (NEC)	168	13.26 3.36	10.43 4.71	13.80 6.51	8.35 2.78	28.52 4.03	16.33 3.82	16.28 2.90	8.60 2.33	8.81 4.55	30.82 10.26	9.76 4.07	13.77 3.70	14.48 5.58	10.08 3.33	9.40 2.59	9.13 3.17	10.90 4.60
828	Machinist	176	13.49 3.38	10.23 4.82	14.38 6.43	8.53 2.79	29.05 3.37	16.68 3.88	16.39 3.12	8.53 2.21	8.98 4.18	29.74 9.69	9.97 3.76	13.84 3.40	14.59 5.89	10.21 3.31	9.48 2.49	9.22 3.02	10.45 4.58
797	Misc. clerical	112	13.34 3.76	11.23 5.57	15.04 7.03	9.34 2.99	28.94 4.59	16.68 4.10	16.60 3.29	8.96 2.08	9.84 5.38	31.21 10.78	9.54 4.27	12.52 4.47	12.59 6.13	8.74 3.56	9.36 2.93	9.30 3.53	11.08 5.42
832	Carpenter	55	12.60 3.32	9.35 4.34	12.33 6.11	8.27 2.69	28.51 3.64	15.67 3.88	15.98 3.18	8.35 2.35	7.09 3.75	27.64 9.11	9.05 3.56	13.76 3.52	15.49 4.54	10.64 2.61	9.62 2.95	8.84 3.07	8.93 4.14
835	Plumber, pipefitter	72	12.82 3.45	10.07 4.50	12.89 6.67	8.38 3.21	28.25 3.29	15.53 4.18	15.94 3.25	8.81 2.18	8.04 4.36	28.72 9.86	9.00 4.43	12.38 4.36	13.51 5.72	9.44 3.29	8.75 2.90	8.54 3.16	9.72 4.23
639	Farming: other and misc. (includes gardener, nurseryman, etc.)	244	12.77 3.22	10.34 4.68	12.90 6.23	8.72 2.83	28.93 3.94	16.88 3.86	16.10 3.11	8.59 2.25	9.18 4.27	28.84 9.90	9.24 3.95	13.78 3.54	14.40 5.30	9.20 3.21	8.92 2.79	9.36 3.16	10.65 4.53
661	Police: Public (NEC)	151	14.40 3.11	10.76 4.49	16.55 7.04	9.58 2.94	29.43 4.05	16.76 4.15	17.43 3.03	9.00 2.20	9.52 4.69	33.58 9.52	10.03 3.50	12.97 3.74	14.39 5.80	9.21 3.30	9.13 2.69	9.09 3.11	10.98 4.55
242	Electrical or electronic engineer	243	17.39 2.46	14.24 5.62	19.23 6.65	10.76 2.55	30.55 3.02	21.51 3.32	19.10 2.84	10.15 1.71	14.98 5.25	41.46 6.07	13.84 3.63	17.02 2.42	17.67 4.45	12.77 2.58	12.05 2.08	13.20 2.41	19.69 3.74
821	Auto mechanic	74	12.74 4.16	9.28 4.28	13.42 7.05	8.82 2.92	28.43 4.48	15.85 4.76	16.34 3.82	8.18 2.37	9.26 5.03	28.99 11.45	10.24 4.45	13.84 4.37	14.41 5.91	9.86 3.45	9.09 2.86	8.74 3.67	9.23 5.10

TABLE 5

Means and Standard Deviations on 17 Selected TALENT Variables for Twelfth Grade Females in Various Career Groups

Group	Title	N	17 TALENT Variables															
			R-102 Vocab.	R-212 Mem. for Words	R-220 Disg. Words	R-231 Spelling	R-232 Cap.	R-233 Punct.	R-234 Eng. Us.	R-235 Eff. Exp.	R-240 Word F(x)	R-250 Read Comp	R-260 Creat.	R-270 Mech. Reas.	R-281 2-D	R-282 3-D	R-290 Abs. Reas.	R-311 Arith. Reas.	R-312 Intro. Math
421	Teaching High School Math	62	17.21 2.75	17.50 5.44	20.55 5.64	12.74 2.09	31.85 1.13	24.19 1.98	20.10 2.54	10.66 1.13	18.74 3.84	42.21 5.22	12.18 3.59	13.18 3.89	16.32 4.49	11.92 2.77	12.19 2.01	13.34 2.06	20.55 2.98
422	Teaching High School Science	41	16.85 2.71	17.05 5.97	22.27 5.44	12.34 2.31	31.78 1.31	23.34 2.43	19.22 2.89	10.32 1.49	17.17 4.37	42.27 5.57	12.56 3.30	11.80 3.87	13.44 4.90	10.00 2.99	10.78 2.75	11.27 3.59	15.37 5.66
337	Graduate Nurse (RN)	703	15.83 2.70	15.72 5.28	19.69 5.90	11.98 2.40	31.44 2.31	22.07 3.20	19.37 2.54	10.28 1.57	15.76 4.67	40.23 5.46	11.11 3.25	10.69 3.40	13.29 5.02	9.77 2.87	10.66 2.16	10.90 2.92	14.16 4.25
426	Teaching High School Commercial Education	50	14.70 2.79	15.52 4.72	20.12 6.37	12.38 2.16	31.46 1.15	22.58 2.40	19.06 2.22	10.58 1.09	14.82 5.18	38.44 8.06	10.58 3.60	8.92 3.37	12.94 5.41	9.04 2.88	10.46 2.89	11.20 3.26	12.82 4.28
717	Accountant, Auditor, Comptroller (except CPA)	50	13.22 3.16	13.70 5.44	17.52 6.44	10.58 2.33	31.36 1.32	20.60 3.28	18.26 2.67	9.34 1.52	12.72 5.68	35.20 7.60	9.58 3.64	9.40 3.18	13.12 5.40	9.20 2.63	10.16 2.29	9.96 3.18	10.92 4.79
400	Teaching (NEC)	1194	15.59 3.11	16.05 5.42	20.05 6.57	12.23 2.31	31.34 2.45	22.18 3.27	19.49 2.60	10.31 1.51	15.90 5.19	39.89 7.03	10.95 3.59	10.29 3.60	13.10 5.25	9.53 3.09	10.70 2.43	10.92 3.18	14.38 4.69
412	Teaching Elementary School	752	15.20 3.03	15.64 5.39	19.47 6.07	12.05 2.43	31.22 2.88	21.93 3.27	19.09 2.62	10.13 1.60	15.61 4.96	38.99 6.73	10.70 3.51	10.10 3.48	12.82 5.33	9.42 2.96	10.57 2.20	10.56 3.08	13.57 4.50
424	Teaching High School English	150	16.45 2.82	16.59 5.51	21.82 6.17	12.73 2.47	31.50 2.83	23.14 3.30	20.09 2.70	10.60 1.57	17.71 4.28	42.35 4.88	11.45 3.45	10.62 3.46	13.45 5.15	9.71 2.83	10.99 1.94	11.61 2.97	14.93 5.43
460	College or University Teacher (NEC)	90	17.29 2.26	17.31 4.85	22.13 5.59	12.70 2.21	31.86 1.18	22.79 2.57	20.19 2.04	10.67 1.49	17.07 4.56	42.29 4.75	11.93 3.52	11.54 3.35	13.39 5.33	10.34 2.85	11.22 1.91	12.09 2.71	15.89 4.53
431	Teaching Art (High School, Elementary School, Non-School)	51	16.33 2.78	16.86 5.41	20.73 5.67	12.25 2.05	31.45 1.14	22.51 2.88	19.67 2.03	10.51 1.46	16.08 4.68	40.53 7.23	11.61 3.38	11.76 3.52	13.63 5.44	11.16 2.78	10.96 2.31	10.61 2.68	13.82 4.36
432	Teaching Music (High School, Elementary School, Non-School)	58	15.97 3.16	17.19 5.78	20.95 6.64	12.41 2.35	31.66 1.18	23.43 3.00	20.14 2.47	10.50 1.65	16.60 5.11	40.64 6.60	11.64 3.81	11.19 4.05	13.78 5.01	10.66 2.54	11.59 2.13	11.50 3.07	14.36 5.36
347	Medical and Dental Technologists (other)	101	16.17 2.67	16.44 4.72	20.34 5.95	12.36 2.41	31.60 1.21	22.81 3.20	19.76 2.61	10.52 1.49	16.87 4.46	41.66 5.32	12.10 3.25	11.60 3.64	13.83 5.01	10.05 2.77	10.95 2.40	11.55 2.91	15.88 4.52
348	Medical and Dental Technician (other); also Lab. Tech. in biol. and Clin. Sciences	134	13.61 3.57	13.15 5.36	16.84 6.90	10.92 2.67	30.82 1.66	20.02 3.45	18.10 2.60	9.62 1.90	12.42 5.55	35.02 9.61	9.95 3.86	9.63 3.80	12.84 5.36	8.89 3.02	9.68 2.54	9.23 3.37	11.07 4.63
741	Salesclerk, checker, cashier in a store	34	10.15 3.39	10.50 4.61	13.88 7.29	10.21 2.53	30.32 1.61	17.35 3.12	16.03 2.55	8.47 1.64	8.53 4.32	26.62 8.30	6.74 3.31	7.59 2.90	8.71 4.69	7.00 3.12	7.62 3.10	6.76 2.80	7.09 3.03
761	Secretary (NEC)	997	13.38 3.45	14.02 5.43	19.17 6.34	11.91 2.36	31.01 2.57	20.87 3.54	18.60 2.66	9.95 1.70	12.84 5.34	35.30 8.14	9.71 3.75	9.00 3.47	12.36 5.45	8.55 3.03	9.69 2.62	9.24 3.29	9.89 4.16
766	Typist, Clerk-Typist	103	11.90 3.35	11.26 4.73	15.86 6.44	10.92 2.23	30.68 1.68	19.18 4.05	17.84 2.81	9.11 1.74	10.03 4.74	30.50 8.70	8.46 3.56	8.12 3.67	11.40 5.27	7.99 2.60	8.78 2.97	7.80 3.70	9.20 3.43
769	Clerk (misc.)	137	11.74 3.47	12.30 6.11	15.63 6.57	10.62 2.52	30.34 3.48	19.21 4.43	17.31 3.20	9.15 2.11	11.00 5.31	30.82 8.78	8.57 3.59	8.45 3.59	11.57 5.51	8.22 3.07	8.62 2.77	8.31 3.50	8.91 3.83
893	Hairdresser, manicurist, cosmetologist	196	10.96 3.13	11.32 4.83	14.59 6.68	10.17 2.35	30.02 3.72	18.09 3.95	17.06 2.92	9.01 1.89	9.58 4.56	29.58 8.81	8.40 3.97	8.71 3.22	12.26 5.49	8.21 2.91	8.76 2.81	7.69 2.96	8.17 3.39
894	Practical nurse (PN)	118	12.04 3.55	12.42 4.80	14.22 6.55	10.71 2.79	30.02 3.10	17.89 3.89	16.77 3.02	8.91 2.09	10.06 4.49	31.14 9.79	8.44 3.46	8.07 3.12	10.86 5.22	7.93 2.99	8.36 3.01	7.92 3.39	8.89 3.51

TABLE 6

Point-biserial Correlations on 17 Selected TALENT Variables for Twelfth Grade Males in Various Occupational Groups

Group	Title	N	17 TALENT Variables																
			R-182 Vocab.	R-213 Mean. Use Words	R-220 Diag. Words	R-231 Spelling	R-232 Cap.	R-233 Punct.	R-234 Eng. Us.	R-235 Eff. Exp	R-240 Word F(n)	R-250 Read Comp	R-260 Creat.	R-270 Mech. Reas.	R-281 2-D	R-282 3-D	R-290 Abs. Reas.	R-311 Arith. Reas.	R-312 Intro. Math
231	Chemist	81	.052	.032	.030	.020	.026	.040	.049	.042	.048	.052	.042	.041	.012	.036	.045	.058	.071
240	Engineer (NEC)	167	.066	.050	.034	.034	.030	.063	.041	.029	.085	.068	.067	.072	.049	.062	.065	.087	.110
250	Architect	58	.034	.021	.021	.008	.020	.033	.014	.018	.028	.025	.025	.039	.036	.057	.038	.029	.045
329	M. D., other and unspecified	229	.115	.095	.089	.095	.055	.112	.099	.080	.129	.104	.064	.053	.028	.045	.072	.111	.140
332	Dentist	97	.051	.038	.036	.029	.023	.043	.031	.024	.046	.044	.042	.040	.027	.044	.044	.039	.061
716	CPA	280	.010	.008	.019	.033	.028	.030	.017	.010	.018	.025	.001	-.001	.018	-.005	.023	.037	.051
730	Business management, business administration (NEC)	511	.040	.017	.026	.035	.024	.030	.025	.015	.015	.035	.036	.027	.017	.018	.041	.040	.041
400	Teaching (NEC)	423	.013	.029	.021	.027	.022	.014	.019	.028	.011	.034	-.002	-.023	-.010	-.028	.009	.020	.017
370	Social work	60	.016	.017	.022	.010	-.006	-.006	.002	.009	.015	.020	.006	-.006	-.006	-.012	.007	-.008	.003
360	Psychologist	106	.061	.035	.039	.046	.035	.056	.059	.048	.055	.062	.047	.033	.014	.023	.051	.047	.061
393	Law	393	.103	.069	.080	.074	.046	.090	.074	.072	.109	.107	.055	.016	.013	.014	.063	.009	.102
460	College or university teacher (NEC)	179	.077	.068	.079	.070	.046	.089	.074	.066	.095	.079	.066	.036	.031	.039	.063	.070	.079
432	Teaching music (high school, 38 elementary school, non-school)		.022	.001	.026	.020	.010	.019	.025	.012	.025	.010	-.008	-.005	.000	-.001	-.006	-.006	-.003
575	Theatre	23	.023	.016	.022	.020	.010	.019	.009	.027	.018	.026	.026	.027	.018	.020	.015	.015	.007
811	Electronic technician	212	.006	-.024	-.014	-.029	-.011	-.019	-.014	-.020	-.019	.004	.016	.046	.014	.035	.009	.005	-.004
864	Draftsman	140	-.045	-.018	-.032	-.035	-.008	-.043	-.035	-.025	-.042	-.045	-.019	-.003	.005	.019	-.002	-.032	-.037
112	Proprietor, contractor, in business for self (NEC)	278	-.038	-.021	-.021	-.042	-.020	-.047	-.025	-.008	-.042	-.038	-.009	.006	.005	.007	-.014	-.031	-.050
748	Other salesmen (NEC)	350	-.022	-.014	-.012	-.021	-.009	-.027	-.019	-.007	-.037	-.016	-.026	-.023	-.025	-.034	-.030	-.020	-.038
810	Electrician (NEC)	168	-.059	-.036	-.050	-.063	-.054	-.064	-.051	-.044	-.058	-.057	-.036	-.012	-.014	-.009	-.035	-.050	-.060
828	Machinist	176	-.053	-.041	-.042	-.057	-.036	-.057	-.045	-.049	-.056	-.072	-.032	-.011	-.012	-.005	-.036	-.049	-.070
797	Misc. clerical	112	-.046	-.016	-.025	-.021	-.032	-.045	-.030	-.020	-.030	-.043	-.035	-.040	-.043	-.043	-.030	-.036	-.046
832	Carpenter	55	-.045	-.033	-.042	-.037	-.031	-.046	-.033	-.033	-.053	-.054	-.031	-.007	.004	.005	-.015	-.034	-.056
835	Plumber, pipefitter	72	-.047	-.028	-.042	-.040	-.041	-.055	-.039	-.032	-.048	-.053	-.037	-.034	-.022	-.019	-.040	-.045	-.054
639	Farming: Other and misc. (inc. gardener, nurseryman, etc.)	244	-.090	-.046	-.085	-.059	-.048	-.060	-.066	-.054	-.061	-.097	-.061	-.014	-.019	-.046	-.065	-.052	-.078
661	Police: Public (NEC)	151	-.022	-.028	-.006	-.016	-.021	-.050	-.008	-.022	-.041	-.024	-.027	-.034	-.015	-.036	-.043	-.049	-.055
242	Electrical or electronic engineer	243	.086	.050	.043	.033	.020	.082	.060	.046	.079	.079	.087	.098	.061	.096	.086	.097	.133
821	Auto mechanic	74	-.050	-.039	-.037	-.030	-.037	-.050	-.031	-.044	-.032	-.052	-.016	-.007	-.010	-.011	-.031	-.041	-.061

TABLE 7

Point-biserial Correlations on 17 Selected TALENT Variables for Twelfth Grade Females in Various Occupational Groups

Group	Title	N	17 TALENT Variables															
			R-102 Vocab.	R-212 Mem. for Words	R-220 Disg. Words	R-231 Spelling	R-232 Cap.	R-233 Punct.	R-234 Eng. Us.	R-235 Eff. Exp.	R-240 Word F(x)	R-250 Read Comp	R-260 Creat.	R-270 Mech. Reas.	R-281 2-D	R-282 3-D	R-290 Abs. Reas.	R-311 Arith. Reas.	R-312 Intro. Math
421	Teaching high school math	62	.056	.037	.019	.031	.023	.057	.035	.030	.061	.045	.037	.064	.044	.060	.055	.069	.114
422	Teaching high school science	41	.041	.026	.029	.017	.017	.035	.012	.014	.035	.037	.035	.032	.008	.016	.017	.025	.039
337	Graduate nurse (RN)	703	.112	.056	.037	.039	.043	.076	.064	.055	.094	.106	.065	.067	.026	.053	.063	.082	.113
426	Teaching high school commercial education	50	.012	.013	.013	.019	.012	.027	.011	.024	.015	.016	.009	-.010	.003	.000	.012	.026	.014
717	Accountant, auditor, comptroller (except CPA)	50	-.011	-.006	-.009	-.021	.010	-.002	-.005	-.015	-.006	-.005	-.007	-.003	.005	.003	.006	.006	-.008
400	Teaching (NEC)	1194	.131	.091	.064	.081	.047	.108	.097	.079	.132	.130	.073	.057	.025	.048	.088	.110	.163
412	Teaching elementary school	752	.078	.054	.030	.047	.027	.070	.044	.038	.091	.078	.042	.033	.007	.029	.057	.063	.090
424	Teaching high school English	150	.067	.041	.048	.047	.022	.062	.054	.043	.077	.072	.038	.029	.015	.022	.041	.058	.066
460	College or university teacher (NEC)	90	.069	.042	.041	.036	.027	.041	.044	.036	.051	.055	.039	.042	.011	.033	.038	.055	.066
431	Teaching art (high school, elementary school, non-school)	51	.037	.027	.019	.017	.012	.026	.023	.022	.028	.030	.025	.035	.011	.040	.023	.017	.026
432	Teaching music (high school, elementary school, non-school)	58	.034	.032	.022	.022	.017	.043	.034	.023	.036	.033	.027	.028	.013	.033	.039	.034	.034
347	Medical and dental technologists (other)	101	.049	.031	.021	.027	.021	.044	.035	.032	.051	.053	.046	.046	.018	.027	.032	.046	.070
348	Medical and dental technician (other); also lab technicians in biological and clinical science	134	-.008	-.020	-.025	-.022	-.003	-.017	-.014	-.010	-.016	-.010	-.002	.001	.003	-.004	-.007	-.011	-.010
741	Salesclerk, checker, cashier in a store	34	-.047	-.032	-.033	-.024	-.010	-.041	-.041	-.035	-.040	-.050	-.041	-.026	-.035	-.031	-.040	-.039	-.042
761	Secretary (NEC)	997	-.037	-.014	.023	.040	.010	.010	.006	.019	-.024	-.021	-.021	-.042	-.014	-.042	-.020	-.029	-.089
766	Typist, clerk typist	103	-.044	-.045	-.034	-.020	-.007	-.033	-.020	-.033	-.049	-.051	-.034	-.033	-.019	-.028	-.034	-.044	-.039
769	Clerk (misc.)	137	-.055	-.034	-.042	-.034	-.020	-.037	-.040	-.036	-.040	-.056	-.036	-.030	-.019	-.025	-.045	-.036	-.051
893	Hairdresser, manicurist, cosmetologist	196	-.090	-.061	-.068	-.061	-.038	-.077	-.058	-.051	-.076	-.083	-.049	-.027	-.008	-.031	-.048	-.064	-.078
894	Practical nurse (PN)	118	-.044	-.030	-.058	-.028	-.029	-.064	-.054	-.045	-.052	-.049	-.037	-.037	-.029	-.032	-.050	-.044	-.047

TABLE 8

Intercorrelation of 17 TALENT Variables for Grade 12 Males

Above the Diagonal and for Grade 12 Females Below the Diagonal

	R-102 Vocab.	R-212 Mem. for Words	R-220 Diag. Words	R-231 Spelling	R-232 Cap.	R-233 Punct.	R-234 Eng. Us.	R-235 Eff. Exp.	R-240 Word F(x)	R-250 Read Comp	R-260 Creat.	R-270 Mech. Reas.	R-281 2-D	R-282 3-D	R-290 Abs. Reas.	R-311 Arith. Reas.	R-312 Intro. Math
R-102	--	.38	.51	.42	.35	.57	.52	.46	.53	.72	.57	.48	.26	.39	.46	.60	.62
R-212	.42	--	.35	.35	.26	.40	.34	.30	.41	.40	.31	.24	.17	.23	.32	.36	.40
R-220	.50	.35	--	.49	.30	.47	.46	.38	.46	.56	.47	.35	.30	.26	.38	.40	.43
R-231	.41	.34	.48	--	.39	.54	.46	.37	.45	.46	.30	.15	.11	.13	.29	.38	.44
R-232	.29	.26	.27	.39	--	.50	.44	.39	.35	.40	.29	.26	.16	.22	.32	.39	.39
R-233	.56	.43	.48	.53	.49	--	.59	.51	.64	.59	.43	.38	.24	.34	.47	.60	.65
R-234	.50	.36	.44	.46	.43	.58	--	.50	.49	.53	.41	.34	.21	.28	.38	.48	.51
R-235	.44	.31	.36	.37	.37	.50	.46	--	.42	.52	.40	.31	19	.26	.37	.46	.43
R-240	.57	.43	.47	.43	.30	.63	.48	.40	--	.61	.46	.39	.27	.38	.47	.56	.63
R-250	.73	.44	.55	.43	.34	.61	.52	.49	.64	--	.61	.49	.29	.41	.54	.62	.62
R-260	.55	.33	.46	.30	.23	.41	.38	.35	.47	.60	--	.55	.34	.47	.47	.49	.47
R-270	.49	.28	.35	.18	.20	.40	.33	.28	.44	.50	.50	--	.47	.61	.54	.48	.46
R-281	.28	.19	.30	.14	.15	.27	.21	.18	.29	.32	.34	.45	--	.47	.39	.30	.30
R-282	.40	.26	.28	.16	.18	.37	.28	.24	.42	.45	.44	.58	.46	--	.53	.42	.43
R-290	.49	.33	.40	.30	.27	.49	.38	.36	.51	.58	.46	.51	.39	.52	--	.52	.54
R-311	.59	.39	.39	.38	.34	.60	.47	.42	.59	.62	.48	.47	.31	.43	.52	--	.71
R-312	.60	.40	.37	.40	.31	.57	.46	.37	.61	.57	.43	.46	.28	.41	.48	.64	--

TABLE 9

Beta Weights for the 17 Selected TALENT Variables for Twelfth Grade Males in Various Occupational Groups

Group	Title	N	Point-biserial MULTR	Biserial MULTR	17 TALENT Variables																
					R-102 Vocab.	R-212 Mem. for Words	R-220 Diag. Words	R-231 Spelling	R-232 Cap.	R-233 Punct.	R-234 Eng. Us.	R-235 Eff. Exp.	R-240 Word F(x)	R-250 Read Comp	R-260 Creat.	R-270 Mech. Reas.	R-281 2-D	R-282 3-D	R-290 Abs. Reas.	R-311 Arith. Reas.	R-312 Intro. Math
231	Chemist	81	.080	.372	.005	.003	-.001	-.019	-.004	-.024	.023	.010	.004	.005	.002	.006	-.019	.003	.005	.011	.061
240	Engineer (NEC)	167	.121	.426	-.007	.010	-.021	-.006	-.008	-.009	-.015	-.023	.036	-.001	.018	.022	.010	-.002	-.004	.018	.095
250	Architect	58	.067	.354	.018	.004	.006	-.012	.006	.015	-.017	.001	-.005	-.016	-.010	-.001	.009	.046	.003	-.015	.036
329	M.D., other and unspecified	229	.161	.503	.038	.031	.016	.013	-.019	-.003	.018	.005	.055	-.011	-.026	-.010	-.012	-.011	-.009	.012	.083
332	Dentist	97	.069	.298	.012	.013	.005	.000	-.002	.002	-.007	-.008	.006	-.007	.006	.022	-.000	.016	.007	-.021	.048
716	CPA	280	.076	.221	-.033	-013	.004	.017	.013	.003	-.008	-.013	-.021	.024	-.018	-.020	.022	-.028	.012	.019	.071
730	Business management, business administration (NEC)	511	.061	.144	.019	-.004	-.002	.024	.004	-.001	-.001	-.017	-.035	-.003	.018	.001	.001	-.013	.029	.017	.020
400	Teaching (NEC)	423	.073	.183	-.015	.022	.007	.003	.011	-.018	.001	.017	-.014	.057	-.017	-.035	.002	-.036	.011	.016	.008
370	Social work	60	.052	.274	.018	.013	.020	-.001	-.007	-.032	-.008	.007	.022	.026	-.005	-.009	-.005	-.018	.012	-.031	.004
360	Psychologist	106	.078	.325	.020	-.000	-.011	.007	-.003	.003	.024	.007	.010	.016	.010	-.003	-.008	-.016	.023	-.017	.025
393	Law	393	.143	.369	.046	.011	.019	-.007	-.010	-.001	-.003	.009	.056	.045	-.016	-.056	-.005	-.033	.016	.012	.035
460	College or university teacher (NEC)	179	.112	.382	.014	.020	.026	.005	-.009	.025	.009	.011	.045	-.009	.015	-.028	.001	-.022	.013	-.003	.005
432	Teaching music (high school, elementary school, non-school)	38	.063	.394	.041	-.012	.025	.002	.002	.012	.019	.003	.039	-.009	-.033	-.008	.002	.010	-.015	-.025	-.035
575	Theatre	23	.045	.353	.008	.006	.004	.016	-.004	.006	-.019	.020	.004	.009	.008	.018	.006	.005	-.006	.000	-.032
811	Electronic technician	212	.076	.244	.009	-.020	-.012	-.010	-.002	-.015	-.004	-.023	-.026	.019	.006	.054	-.008	.024	-.006	.012	-.005
864	Draftsman	140	.076	.285	-.024	.007	-.004	-.002	.022	-.025	-.009	.004	-.020	-.033	.005	.003	.002	.042	.025	-.004	-.011
112	Proprietor, contractor, in business for self (NEC)	278	.076	.221	-.018	.004	.009	-.016	.004	-.028	.006	.027	-.015	-.026	.013	.024	.003	.021	.004	.008	-.043
748	Other salesmen (NEC)	350	.055	.147	-.004	.004	.012	-.014	.007	-.004	-.004	.013	-.027	.026	-.014	.005	-.010	-.019	-.010	.020	-.032
810	Electrician (NEC)	168	.084	.294	-.023	.002	-.008	-.020	-.023	-.012	-.000	-.001	-.016	-.007	-.002	.027	-.005	.019	-.003	-.000	-.019
828	Machinist	176	.092	.316	.006	-.006	.006	-.017	.001	-.001	.004	-.012	-.004	-.062	.009	.024	-.006	.026	-.001	.014	-.056
797	Misc. clerical	112	.066	.270	-.021	.008	.008	.004	-.012	-.028	.001	.013	.014	.018	.001	-.001	-.027	-.019	.015	.010	-.021
832	Carpenter	55	.080	.433	-.004	-.005	-.015	.007	-.008	-.004	.009	-.001	-.026	-.035	-.008	.012	.012	.030	.018	.020	-.051
835	Plumber, pipefitter	72	.066	.320	-.003	.003	-.008	-.004	-.014	-.020	.004	.008	-.006	-.019	-.000	-.009	-.004	.019	-.007	.004	-.021
639	Farming: other & misc. (includes gardener, nurseryman, etc.)	244	.127	.388	-.043	.004	-.048	.006	-.010	.020	-.011	.002	.013	-.061	-.003	.079	.012	-.035	-.028	.037	-.045
661	Police: Public (NEC)	151	.077	.281	.021	-.009	.018	.006	.002	-.045	.036	-.002	-.010	.020	-.008	-.008	.010	-.009	-.018	-.021	-.038
242	Electrical or electronic engineer	243	.151	.462	.002	.002	-.021	-.012	-.041	.019	.005	-.010	-.013	-.012	.027	.029	.002	.030	.003	-.004	.129
821	Auto mechanic	74	.082	.393	-.020	-.016	-.014	.018	-.013	-.019	.017	-.020	.024	-.032	.027	.031	-.002	.007	-.004	.010	-.057

TABLE 10

Beta Weights for the 17 Selected TALENT Variables for Twelfth Grade Females in Various Occupational Groups

Group	Title	N	Point-biserial MULTR	Biserial MULTR	17 TALENT Variables															
					R-102 Vocab.	R-212 Mem. for Words	R-220 Disg. Words	R-231 Spelling	R-232 Cap.	R-233 Punct.	R-234 Eng. Us.	R-235 Eff. Exp	R-240 Word F(x)	R-250 Read Comp	R-260 Creat.	R-270 Mech. Reas.	R-281 2-D	R-282 3-D	R-290 Abs. Reas.	R-311 Arith. Reas.	R-312 Intro. Math
421	Teaching high school math	62	.122	.642	-.001	-.001	-.022	.002	-.008	.010	-.012	-.001	-.003	-.025	-.011	.018	.012	.016	.003	.003	.124
422	Teaching high school science	41	.058	.360	.019	.006	.010	-.008	.006	.021	-.024	-.009	.009	.010	.016	.018	-.011	-.009	-.016	-.016	.024
337	Graduate nurse (RN)	703	.136	.292	.061	-.000	-.038	-.018	.009	-.006	-.001	-.001	.028	.057	-.007	.007	-.011	-.006	-.011	-.016	.070
426	Teaching high school commercial education	50	.045	.257	-.005	.001	.003	.003	-.005	.025	-.012	.016	-.005	.001	.001	-.033	.004	-.004	.005	.029	-.002
717	Accountant, auditor, comptroller (except CPA)	50	.040	.228	-.010	-.002	.000	-.028	.020	.009	.001	-.020	-.005	.004	-.005	-.009	.006	.002	.014	.024	-.011
400	Teaching (NEC)	1194	.182	.331	.038	.018	-.028	.001	-.018	-.005	.015	.005	.043	.052	-.015	-.030	-.014	-.025	.009	-.016	.126
412	Teaching elementary school	752	.114	.239	.031	.011	-.030	.003	-.008	.014	-.015	-.008	.057	.031	-.009	-.018	-.018	-.014	.016	-.017	.054
424	Teaching high school English	150	.091	.337	.017	-.001	.004	.003	-.015	.007	.010	.002	.044	.035	-.012	-.013	-.005	-.015	-.007	.002	.024
460	College or university teacher (NEC)	90	.080	.362	.044	.010	.009	.001	.004	-.024	.007	.002	.004	-.003	-.005	.008	-.019	.004	-.003	.011	.036
431	Teaching art (high school, elementary school, non-school)	51	.054	.304	.028	.012	-.005	.003	-.003	.005	.002	.007	.005	-.004	-.002	.017	-.014	.034	-.006	-.025	.001
432	Teaching music (high school, elementary school, non-school)	58	.053	.287	.007	.013	-.005	-.004	-.007	.026	.013	-.002	.002	-.010	.001	-.001	-.010	.015	.019	-.000	.003
347	Medical and dental technologists (other)	101	.077	.332	-.003	.000	-.020	-.000	-.002	.002	-.001	.004	.010	.023	.018	.021	-.004	-.013	-.013	-.009	.060
348	Medical and dental technician (other); also lab tech. in bio. and clinical science	134	.037	.143	.009	-.014	-.024	-.012	.011	-.008	-.003	-.000	-.006	.005	.012	.009	.010	-.007	.000	-.004	.001
741	Salesclerk, checker, cashier in a store	34	.063	.425	-.012	-.007	.002	.006	.020	-.008	-.017	-.010	.001	-.017	-.011	.020	-.021	-.002	-.008	.002	-.012
761	Secretary (NEC)	997	.136	.261	-.025	-.006	.031	.055	-.005	.048	.010	.027	.001	-.006	-.003	-.011	.007	-.020	.007	.016	-.145
766	Typist, clerk typist	103	.065	.279	-.004	-.026	-.007	.008	.014	.008	.018	-.013	-.023	-.026	.003	-.004	.002	.001	.002	-.014	-.002
769	Clerk (misc.)	137	.067	.257	-.022	-.006	-.011	-.003	.005	.012	-.009	-.007	.008	-.025	.002	.006	.002	.005	-.019	.015	-.029
893	Hairdresser, manicurist, cosmetologist	196	.108	.363	-.050	-.016	-.024	-.002	.003	-.021	.006	.001	-.016	-.023	.009	.030	.021	-.001	.004	.006	-.030
894	Practical nurse (PN)	118	.078	.317	.066	.005	-.37	.025	.006	-.042	-.020	-.012	-.006	.009	.005	.001	-.003	.004	-.019	.006	-.012